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TELECOPIER TRANSMISSION REPORT

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SUBJECT: Analyte List

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2.0 PROJECT DESCRIPTION

Sediment samples will be analyzed for polychlorinated biphenyls (PCBs) and polychlorinated terphenyls (PCTs, Table 1). The QAP and work plans under which these samples were generated or collected are independent documents and not included or considered herein. This QAP describes the minimum requirements to be taken to provide for the chemical analyses (and associated physical normalizing parameters) of the previously generated or collected samples in a technically sound and legally defensible manner.

More detailed descriptions of the procedures and protocols under which the samples were collected, including sample custody procedures, are given in the Duwamish River Sediment Study Draft Sampling and Analysis Plan (EcoChem 1997). **Table 1** presents the chemical analytes for evaluation of sediment samples. The compounds selected for analysis are representative of the contaminants known to have been released into the area. Results from this sediment characterization will help to define exposure of the resources, as well as indicating the magnitude and extent of the injury to the resources.

Table 1
ANALYTE LIST

Parameter	Method
Aromatic Hydrocarbons (AHs)	GC/MS method specified in the NOAA Technical Memorandum by Sloan *et al.* (1993)
Low Molecular WeightAHs	
Naphthalene	
Acenaphthylene	
Fluorene	
Anthracene	
Acenaphthene	
Phenanthrene	
2-Methylnaphthalene	
LAH (sum of low molecular weight AHs)	
High molecular weight AHs	
Fluoranthene	
Pyrene	
Chrysene	
Benzo(a)pyrene	
Dibenz(a,h)anthracene	
Benzo(a)anthracene	
Benzo(b + k)fluoranthenes	
Indeno(1,2,3-c,d)pyrene	
Benzo(g,h,i)perylene	
HAHs (sum of high molecular weight AHs)	

Table 1 (continued)

Parameter	Method
PCBs by HPLC/PDA Total PCBs, and Selected PCB Congeners (Nos. 77, 101*, 105, 118, 126, 128*, 138, 153, 156, 157, 169, 170*, 180, 189)	HPLC/PDA method specified by Krahn *et al.* (1994) and Draft Standard Operating Procedures for Sediment Extract (1994)
PCTs by GC/ECD Total Aroclor 5460 equivalents	A portion of the HPLC/PDA extract (above) will be analyzed using modifications of the GC/ECD method specified by NOAA Technical Memorandum by Sloan *et al.* (1993)
PCBs by GC/ECD (Nos. 18, 28, 44, 52, 66, 101, 105, 118, 128, 138, 153, 170, 180, 187, 195, 206, 209); Total PCBs	GC method specified in the NOAA Technical Memorandum by Sloan *et al.* (1993). Total PCB concentrations will be calculated as (2 * $\sum$ concentrations of 17 congeners)
Metals	Standard Operating Procedures for Metals Analysis of *Hylebos* Sediments (Krone *et al.*, 1997)
Arsenic	GFAA, ICP
Cadmium	GFAA
Chromium	GFAA, FAAS
Copper	GFAA, FAAS
Lead	GFAA
Mercury	CVAA
Nickel	GFAA
Silver	GFAA
Zinc	ICP, FAAS
Conventionals	
Total Organic Carbon	PSPG
Grain Size	NOAA method by Sweet (1994)
Dry Weight	PSPG

* Known compounds coelute with these PCB congeners

Notes: PSPG - Puget Sound Protocols & Guidelines, April 1997
GFAA - Graphite Furnace Atomic Absorption
ICP - Inductively Coupled Plasma
FAAS - Flame Atomic Absorption Spectroscopy
HPLC/PDA - High-Performance Liquid-Chromatography/Photodiode array detection
GC - Gas Chromatography